

# ***Errata to the Apple II 80-Column Text Card Manual***

Who should read these errata:

Pages 1-2: Users of BASIC programs. (If you know to type CATALOG, you are one.)

Pages 3-4: BASIC programmers, both new and experienced.

The Apple IIe 80-column text card is a brand new device; it did not exist when most of the thousands of programs for your computer were written. These programs expect to find the 80-column text card turned off when they begin to run, so you must never turn it on yourself before you run a program. Those programs that use the 80-column card will turn it on themselves.

The simplest way to avoid ever turning on the 80-column card is to not bother learning how to do it (you won't do it accidentally). Therefore, if you will be running programs, rather than writing them, please read the manual only through to the top of page 16. Then come back to read only page 2 of this errata.

## **How to Turn Off the 80-Column Text Card**

(You don't have to know how to turn it on, but you need to be able to turn it off in case a program you've run has left it on.)

When you are about to use the CATALOG or RUN instruction, you should be presented with the blinking, checkerboard cursor. If you see a solid box cursor instead, do the following:

1. Press the RETURN key.
2. If the cursor is not now on the extreme left of the display, type the word TEXT and press the RETURN key. This should leave the cursor in the extreme bottom left of the display.
3. Press the ESCAPE key and then CONTROL-Q. This command actually turns off the card. If the blinking checkerboard is now on the screen (as it almost certainly will be), all is well with the world; you may use CATALOG and RUN to your heart's content.

Should these steps fail, you are probably not really working with a BASIC disk: select a different startup disk and start up the system again.

You have now covered all the information you need. The balance of this errata and the balance of the manual should be read only by programmers. If you want to learn BASIC, please read the *Applesoft Tutorial* manual as your first book.

## Vital Information for Programmers

- The 80-column card should be used with the new, blinking underline cursor input routine. You will find a first release of the routine, written in BASIC, in the MAGIC MENU program, which is on The Applesoft Sampler, the disk supplied with the Apple IIe Applesoft Manual Set. Appendix E of the *Applesoft Tutorial* explains how to use this and the other supplied routines. You can find a detailed specification of this routine and other Apple IIe conventions in the manual, *Apple IIe Design Guidelines*. Apple Computer, Inc. will be releasing a 6502-based version of the input routine soon.

The 80-column card is not designed to support the standard Applesoft INPUT and GET statements, nor the underlying monitor KEYIN routine. Use of them can result in loss of program or data; use the blinking underline cursor routine or read HEX \$C000 directly instead.

- Unless you are writing programs only for yourself, do not assume the presence of an 80-column card, any more than you would assume the presence of a modem in slot 2. The Applesoft Sampler disk's MAGIC MENU program also contains COMPUTER IDENTIFIER, a routine that will tell your program what hardware it is currently running in, including the presence or absence of an 80-column card.
- Do not use either HTAB or POKE 36 in an 80-column program. Instead, use

POKE 1403, <horizontal position 0 to 79>

We have found a few unlikely combinations of current position and destination that will not work with POKE 36. POKE 1403 always works with 80-column text. (It must not be used with 40-column text.)

For more detailed information on doing horizontal tabbing in programs that intelligently run either 40- or 80-column computers, as well as techniques for determining current horizontal position, see Appendix E of the *Applesoft Tutorial* and MAGIC MENU's program listing.

- The commands ESCAPE 4 and ESCAPE CONTROL-Q must never be typed when the cursor is beyond column 39. These commands turn off the 80-column card but leave the horizontal tab position as it was. The 40-column firmware will print the next character off the right edge of the display, in an area of memory that may contain your program or other data. (You may usually recover by immediately pressing RETURN.)

Appendix E's programs have a single-line routine (RUN 2) that neatly sidesteps the problem. Use that solution, or be certain that the cursor is at or near the left margin before typing ESCAPE 4 or ESCAPE CONTROL-Q.

- VTAB works normally as long as no window is set. If you set a window while using 80-column text, VTAB to the previous line, then PRINT to bring you to the desired line. For example, to print CAT on line 15 type

VTAB 14: PRINT: PRINT "CAT"

- Before sending output to other peripheral devices, and at the end of your program, be sure to include a line such as

999 PRINT CHR\$(12); CHR\$(21)

to clear the display and turn off the 80-column card. You may then print any message you want the user to continue seeing on the 40-column display.

- It is your responsibility to leave the user with the 80-column text card off.